Communicable Disease Epidemiology and Immunization Section

401 Fifth Avenue, Suite 900 Seattle, WA 98104-1818

206-296-4774 Fax 206-296-4803

TTY Relay: 711

www.kingcounty.gov/health



November 12, 2009

INFLUENZA SITUATION REPORT for CDC Week 44 (ending 11/7/09)

Snapshot (updated 11/12/09):

- The daily count of emergency department visits for ILI has decreased from the peak seen in October 2009. However, it is important to interpret this decrease with caution, as data are incomplete.
- The number of reported hospitalizations decreased slightly for week 44 compared to the previous week.
- Two deaths in people confirmed to have 2009 H1N1 were reported during week 44. Both were adult females with underlying health conditions.
- The number of specimens submitted and testing positive for influenza from our outpatient surveillance system has decreased for the past two weeks.
- Local hospital laboratories have reported a decrease in specimens submitted and proportion positive for flu by rapid antigen testing during week 44.
- The proportion of deaths due to pneumonia and influenza has been below the epidemic threshold since mid-September.
- Several long-term care facilities have reported cases of influenza-like illness in their facilities since mid-October.
- School absenteeism has been fairly stable for the last several weeks.

For information on current surveillance and testing guidelines for 2009 H1N1 influenza, see: http://www.kingcounty.gov/healthservices/health/preparedness/pandemicflu/swineflu/providers.aspx.

Case counts, 2009-2010 flu season (updated 11/12/09).

2009-2010 Influenza Season (starting October 5th):

Lab-confirmed 2009 Influenza À H1N1 Hospitalizations:	152
Lab-confirmed 2009 Influenza A H1N1 Deaths:	5

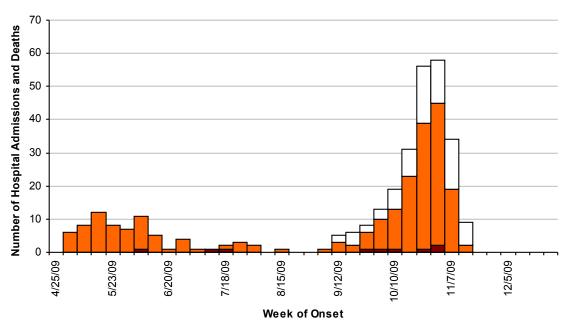
Lab-confirmed Influenza Hospitalizations, not H1N1 or not tested for H1N1: 66
Lab-confirmed Influenza Deaths, not H1N1 or not tested for H1N1: 1

2008-2009 Influenza Season (through October 4th):

Lab-confirmed 2009 Influenza À H1N1 Hospitalizations: 82
Lab-confirmed 2009 Influenza A H1N1 Deaths: 3

Lab-confirmed Influenza Hospitalizations, not H1N1 or not tested for H1N1: 12 Lab-confirmed Influenza Deaths, not H1N1 or not tested for H1N1: 1

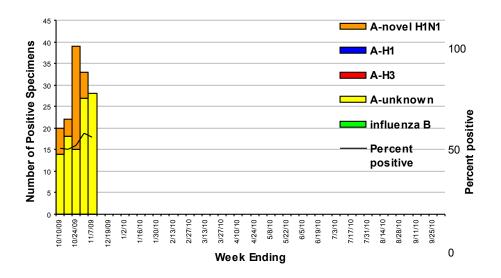
Public Health - Seattle and King County Hospital admissions and deaths due to laboratory-confirmed influenza



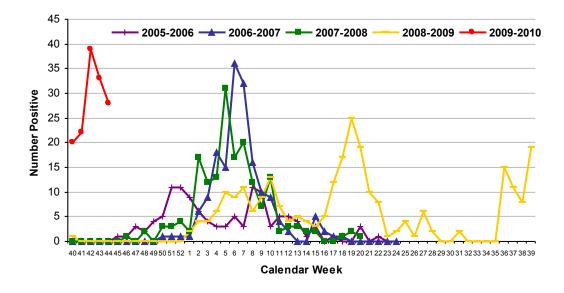
- ☐ Flu positive hospitalizations, not tested for H1N1 and non-H1N1
- 2009 H1N1 hospitalizations
- Flu positive deaths, not tested for H1N1 and non-H1N1
- 2009 H1N1 deaths

Sentinel Provider Surveillance through the Public Health Laboratory (updated 11/12/09): During week 44, 47 specimens were submitted by sentinel providers for respiratory virus testing, 28 of which were positive for influenza A and two of which were positive for parainfluenza. The number of specimens submitted for testing and number testing positive for flu has decreased over the past two weeks. All flu isolates that have been subtyped have been the 2009 H1N1 strain. To compare the current flu season with previous years, see graphs below.

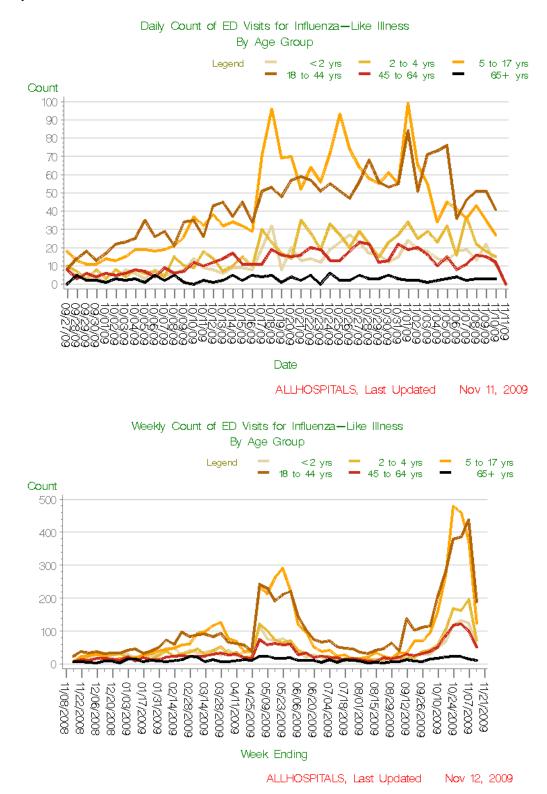
Public Health - Seattle and King County Sentinel Provider Influenza Surveillance Laboratory Confirmed Isolates



Public Health - Seattle and King County Sentinel Provider Influenza Surveillance Influenza A by Season

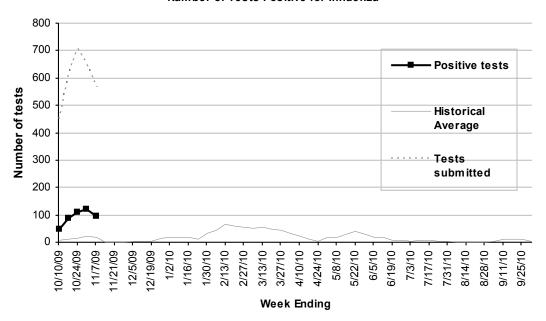


Syndromic Surveillance (updated 11/12/09): The daily count of ED visits for ILI is now similar to the levels seen for the spring 2009 H1N1 outbreak. However, it is important to interpret the reduction in ILI ED visits with caution, as some hospitals have not yet reported their data. The weekly volume of ED ILI visits is currently highest among children aged 5-17 years and adults aged 18-44 years. The count of ED visits has been on a slight downward trend since the beginning of November. The figure below shows daily count of ED visits from the end of September onwards. The second figure gives the long-term picture, showing daily count of ED visits for the last year.



Rapid Antigen Surveillance (updated 11/12/09): During week 44, 95 of 565 (16.8%) of rapid antigen tests reported by hospital laboratories were positive for influenza, which is more than twice the average proportion observed this time of year, though represents a small decline from the previous week. Note that rapid antigen tests are only 10-70% sensitive in detecting 2009 H1N1 influenza. For information on respiratory virus detections conducted at University of Washington's Clinical Virology Lab, see: http://depts.washington.edu/rspvirus

Public Health - Seattle & King County Laboratory Influenza Rapid Antigen Test Surveillance Number of Tests Positive for Influenza

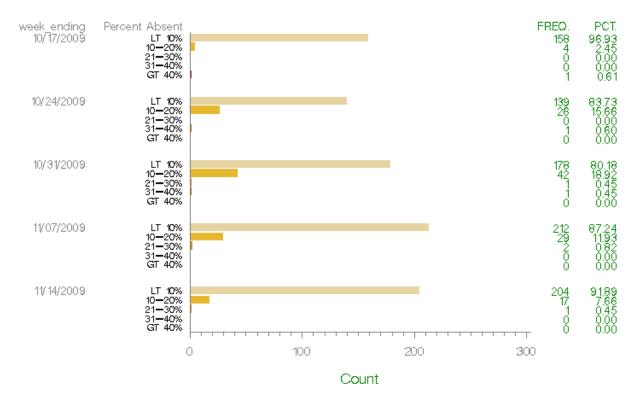


P & I (Pneumonia and Influenza) Deaths (updated 11/12/09): 4.1% of deaths were attributed to pneumonia and influenza during week 44 (national epidemic threshold not yet available). 3.7% of deaths were attributed to pneumonia and influenza during week 43, which was below the national threshold of 6.7%. During the peak of flu season, the national epidemic threshold typically ranges from 7.5 – 8.0%. The last week the national threshold was exceeded was in mid-September (6.4% vs. 6.3%).

Long-term Care Facilities (updated 11/12/09): Public Health has received reports of illness from five long-term care facilities since mid-October. In several instances, illness was limited to one resident, or to staff who did not have patient contact. Two facilities were recommended to initiate antiviral prophylaxis to limit further transmission among residents and staff.

School Absenteeism (updated 11/12/09): Eighteen of 19 King County school districts are reporting absenteeism through our automated system. Historical data allowing examination of trends over time are only currently available for two districts. Overall, absenteeism decreased slightly for week 44 compared to week 43. The proportion of elementary schools with average weekly absenteeism greater than 10% decreased during week 44. Absenteeism has been relatively stable for middle and high schools for the past several weeks.

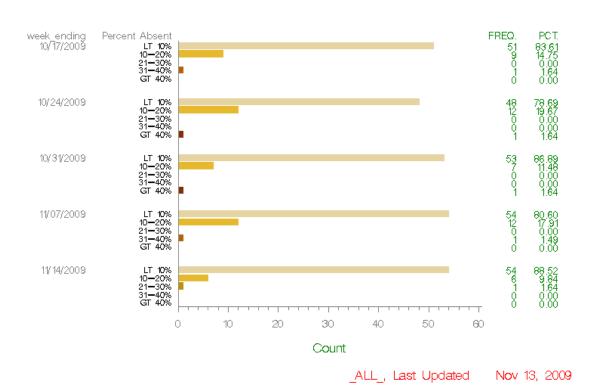
Distribution of Absenteeism by Grade Level Elementary Schools



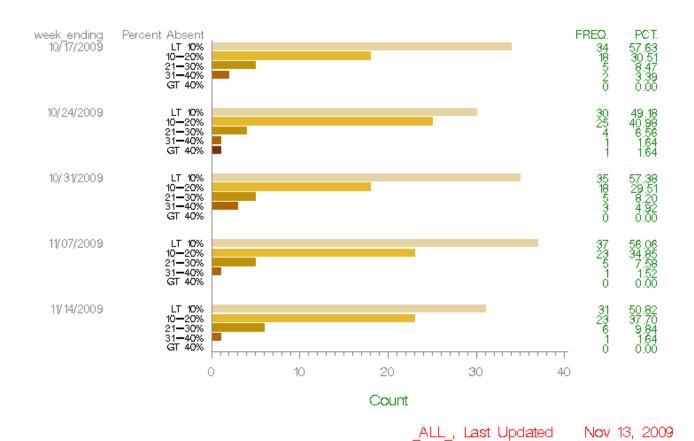
ALL, Last Updated Nov 13, 2009

Distribution of Absenteeism by Grade Level

Middle Schools



Distribution of Absenteeism by Grade Level High Schools



Beyond King County

United States (updated 11/9/09): During week 43 (October 25-31, 2009), influenza remained elevated in the U.S. The CDC synopsis for week 44 (November 1-7, 2009) is not yet available. The synopsis below reflects data from week 43.

- 5,258 (37.2%) specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories and reported to CDC/Influenza Division were positive for influenza.
- Over 99% of all subtyped influenza A viruses being reported to CDC were 2009 influenza A (H1N1) viruses.
- The proportion of deaths attributed to pneumonia and influenza (P&I) was above the epidemic threshold.
- Eighteen influenza-associated pediatric deaths were reported. Fifteen of these deaths were associated with 2009 influenza A (H1N1) virus infection and three were associated with an influenza A virus for which the subtype was undetermined.
- The proportion of outpatient visits for influenza-like illness (ILI) was above the national baseline. All 10 regions reported ILI above region-specific baseline levels.
- Forty-eight states reported geographically widespread influenza activity, two states reported regional
 influenza activity, the District of Columbia reported local influenza activity, Puerto Rico and Guam reported
 sporadic influenza activity, and the U.S. Virgin Islands did not report.

For more on nationwide flu activity, visit the following site: http://www.cdc.gov/flu/weekly/

Washington State (updated 11/12/09):

- From September 19-November 7, the Department of Health (DOH) received reports of 918 hospitalized and 28 fatal cases of laboratory-confirmed influenza.
- During week 44, the number of hospitalized and fatal influenza cases reported to the DOH decreased slightly from the previous week (202 cases reported in week 43 vs. 191 cases reported in week 44). Of the 191 hospitalized and fatal cases reported during week 44, 68 reside east and 123 reside west of the Cascade Mountains.
- Almost all circulating influenza viruses in Washington are 2009 H1N1 viruses.
- Overall, influenza activity remains high in Washington but appears to be decreasing.
- The geographic distribution of influenza activity is widespread, meaning that influenza activity is elevated in over half the regions in Washington.

For more information on statewide flu activity, visit the following site: http://www.doh.wa.gov/EHSPHL/Epidemiology/CD/fluupdate.pdf.